Body: Not to ſay, how little it ſavors of the rankneſs of the Kidneys, and how much it reſembles that, which it was, before 'twas taken into the Body. And methinks, the conveyance of the Milk into the breaſt hath much affinity with this of the Urine into the Bladder; the ſudden preſſing whereof into the Papps after the Nurſes drinking ordinary Milk could no more be explained by the ordinary doctrine of *Circulation*, than this of the urine into the Bladder, till the ſhorter cut was hit upon by the *Ductus thoracici*; though ordinarily it may be ſtrayn'd in from the Arteries, as the *Serum* alſo in the Kidneys; onely in a Milk-floud Nature finds ſome other Channel there, as here in a Water-floud.

Laſtly, Sometimes things are ſhed forth at the Niples, almoſt as much ſurprizing as this, we have ſpoken of, at the Neck of the Bladder. But I am perhaps too prolix in my reflexions, of which I deſire you to believe I have as mean thoughts, as the Candidſt of Readers ſhall. I am, *&c.*

Wooabridge, Sept. 18. 1668.

II. Joh. Hevelii *COMETOGRAPHIA. Printed at* Dantzick *A.* 1668. *in large* Folio.

IN this curious and learned Volume the Illuſtrious Author hath with great induſtry endeavour'd to explain the *whole Nature* of *Comets*, their Place, Parallaxes, Diſtances from the Earth, Beginning and End, the ſeveral Appearances of their Heads and Trayns, together with their admirable motion; And all this by means of one conſtant and fit *Hypotheſis*, by which he judgeth that all the *Phænomena* and *Queſtions* touching *Comets*, hitherto known, may be rationally and conveniently explained and demonſtrated: All illuſtrated by 38 Schemes in *Folio*, engraven by the Author himſelf; as the whole Book hath been Printed at his own charges. To which is added both a *Particular* explication of the *Comets*, which appear'd *A.* 1652, 1661, 1664, 1665; and an Hiſtory of all the Comets, recorded by Hiſtorians, Philoſophers and Aſtronomers from the *Noachical* Deluge unto this day, enriched with the Authors Notes and Animadverſions, and a general *Table*, repreſenting, as it were, in one view, the moſt remarkable particulars obſerved in all Comets, *viz.* concerning

the time of their firſt apparition, their duration, place, motion direct or retrograde, ſlow or ſwift; the bigneſs, figure and colour of their Heads, and the bigneſs, ſhape and poſition of their Tayles.

He begins his enumeration and Hiſtory of the *Comets* from *A.* 1656. after the *Creation of the World*, or from *A.* 2292. before the *Nativity of our Lord*; where the Reader will meet with a great and pleaſant variety of the ſhapes, colors, brightneſs, magnitudes, *&c.* of Comets, together with the various conſequences, noted by Authors and Men of an *Aſtrological* and Divinatory *Genius*. He reckons up about 250 Comets in number; not as if there had not been many more, but becauſe no more have been Regiſtred in Ages, either negligent *of*, or leſs knowing *in* ſuch matters. He alſo takes notice of more Comets than one appearing at once, whereof there are to be found ſuch Examples, that ſeveral times have been ſeen *two*, ſometimes *three*, and twice *four* together; which latter he obſerves to have hapned *A.* 1529. and *A.* 1618. He notes ſome of the forme of a Wheel, ſome of that of an Horn, others of the ſhape of a Sword, Dagger, Zable, Javelin, Hallebard, Dragon, Beard, Flaming Pillar, Timber-beam, Diſh, Shield, Tube, Pyramid; others with two or three Tayles; others, Trayn-leſs; others ſo reſplendent, as to enlighten the Night conſiderably, yea as bright as the Sun, obſcuring all other Stars; ſome round, ſome ovall, ſome ſquare; others having their Train diſcontinued and interrupted in one or more places, as if it were abſorbed by the Sky, and emerged again; others having Tayles like Peacocks; others ſuch, as extended themſelves into the length, ſome of 30, ſome of 40, 45, 60, 70, 100 degrees and above.

He takes notice, that before the Noble *Tycho* no Comet hath been exactly and fully obſerved or deſcribed; and he gives a large account not onely of the Comets of the ſaid *Tycho*'s Obſervation, which appear'd *A.* 1577. 1590, but alſo of that, which was ſeen *A.* 1607, (accurately deſcribed by *Longomontanus* and *Kepler*) and of thoſe of 1618, eſpecially that famous one of the ſame year, which at firſt was 71 Semi-diameters of the Earth diſtant from the Earth, but at laſt farther from it than the Sun, in regard it had towards the end a leſſer *Parallax*, than he: beſides that it had

had an extraordinary Trayn, ſometimes 45, 60, 75, yea 104 degr. long; as alſo that for ſome time it ſhone all night, and now and then ſeem'd to break out into Lightning. To all which he adds the Obſervations of the Comets ſeen *A.* 1647, 1652, 1661, 1664, 1665, of which the laſt four were diligently obſerv'd and are exactly deſcribed by himſelf.

As for the *Theory*, whereby the Author renders an Account of all the *Phænomena* of *Comets*, he ſuppoſeth, that they all move in a *Streight Line*, by which ſuppoſition (firſt ſuggeſted by *Kepler*) and no other, that he can imagine, he eſteems that all the Appearances of them, how inſoluble ſoever elſe they ſeem, may very eaſily be explicated, eſpecially ſuppoſing the Sun in the Center of the Univerſe, and the Annual motion of the Earth; though he ſuggeſts alſo a way of ſaving the ſaid *Rectilinear* motion even without deſtroying the ſyſteme of *Ptolomy*. But yet he would not be underſtood ſo ſtrictly in aſſerting that *ſtreight* motion, but that Comets may more or leſs deviate from that ſtreightneſs, both in appearance, and really; the *former* ariſing from the various ſight of them, and their various diſtance from the Earth and the Sun, and the Annual motion of the Earth; the *latter*, from the matter of their Bodies and *Nucleus*'s (as he calls the ſubſtance of their *Head*) not increaſing nor decreaſing uniformly on all ſides. To which he adds the conſideration of a motion impreſs'd, and that of an Inclination of the Cometick Disk to the Sun, as two other Cauſes, why Comets may now and then, eſpecially about the beginning and end of their appearance, ſomewhat digreſs from their ſtreight courſe. Where he alledges, that he hath much laboured to give an account of Comets by a *Circular* motion, but could not poſſibly ſatisfie himſelfe in it, nor anſwer the *Phænomena* of moſt, though perhaps that *Hypotheſis* may ſerve to ſalve ſome of them.

But then, to explaine that *Trajectory rectilinear* motion, he ſubjects the Comet of *A.* 1652. to a very rigid *calculus*, to ſhew, how that line is to be delineated, and how that way is applicable to all other Comets.

Further, to render a *Cauſe* of this motion, he ſuppoſeth, that, as all Celeſtial Bodies move about their *Axes*, their Atmoſphere wheeling perpetually round about with them; ſo the matter,

which exhaleth from the Sun and the other Planets, not onely iſſues out of them in a ſtraight way, but alſo, whil'ſt thoſe Bodies, together with their Atmoſphere, move round, turnes conſtantly about with them, till it deſert the ſaid Atmoſphere. To which he adds, that the matter of thoſe exhalations are of the like nature with our Terreſtrial Vapors, in that they are apt to condenſe, and after a while to be diſſolved, and to return again to their firſt principles. Having ſuppoſed this, he aſſumes farther, that Bodies turn'd round, the longer they move, and the greater the Circle is, they move in, the greater *impetus* and vehemence they acquire, tending alwayes to recede from the Center to the Circumference, and being ſeparated and ſet at liberty from their vertiginous or circular motion, they continue to be moved (as long as no ſtop intervenes,) but no more in that *circulary*, but in a *ſtraight* line, *viz.* in the *Tangent* of the Circle.

After this manner he concludeth, That as ſoon as vapors exhale or are expelled out of a Celeſtial Body, whether it be the Sun or other Planets, into the Atmoſphere incompaſſing it (which that they do, he endeavours to prove) they ſtill acquire more and more force to move from the Center or the Planet to the Circumference (by vertue of the ſwift circumrotation of the Atmoſphere, which together with its Body or Planet is turn'd round about,) till at laſt, being ejected out of their Circle into the free Sky, and more and more ſupplyed with the acceſſion of the like matter, they make up the Bodies of Comets, and then move in a ſtraight line, obverting one ſide to the Sun, as Clouds do theirs to our Earth.

Having laid down this, he deduceth thence the explication of the *Phænomena*, and Queſtions, hitherto obſerved and raiſed in and about Comets, *viz.* How they increaſe in bulk, and commonly with much quickneſs near the Sun? Why they are made up of ſeveral *Kernels*? Why not all Cometick matter is moved towards the ſame quarter of the Heavens? How it comes to paſs, that at one and the ſame time more Comets than one are produced, and that they meet one another, and by their mutual concourſe change one anothers motion; or break into parts and ſo conſtitute ſeveral Stars? Why all Comets are not viſible to us? Why there are more Comets in one Age, than another?

Why

Why they do not alwayes move equal ſpaces in equal times; nor alwayes in a Line *preciſely* ſtreight, (there being almoſt none ſuch in Nature but ſometimes with an Inclination of its Diske, ſo as to make a *Parabola*, yet never the Segment of a *Circle*? How they obſerve two motions, an External, and Internal or Natural? How one of the flat ſides of the *Cometick* Diske reſpecteth the Sun, as the *Magnetick* Needle does the North-Pole? Why the Motion of Comets is ſwifteſt, where the Sun-beams fall perpendicularly on it? Why the motion of a recent Cometick matter is made *Spirally*? Why that *Spiral* is not the ſame in all Comets? Why one Comet moves much ſwifter than another? Why the motion of one and the ſame Comet increaſeth and decreaſeth? How a new Comet iſſues out of its Atmoſphere? That the denſeſt Comets move ſwifteſt. That, though the motion of Comets be unequal, yet 'tis not irregular. Whether Comets alwayes are moſt vigorous in the middle of their way? When Comets deſcribe a *Semi-parabola* only? Why Comets are almoſt never perceiv'd by Us, when they firſt emerge out of their Atmoſphere? That the motion of Comets hath a conformity with that of Ships. That the Sun does the ſame in the deviation of Comets, what a Pilot or Ship-maſter doth by the meanes of Cables in the direction of Sayling. That Comets, like Ships, deſcribe ſometimes an entire, ſometimes a *Semi-parabola*. That it appears by the inflexion of the Trajectory line, whether the way of the Comet be *Circular* or *Elliptick* or *Parabolical*. Why this motion is rather *Parabolical*, than *Hyperbolical*? That the greateſt deviation of Comets from the line of direction is ſcarce of two degrees; though 'tis not altogether improbable, but that in ſome it may be a little greater, eſpecially in thoſe, that traverſe through a much vaſter ſpace of the Heavens, than others, and are of a very long duration: That the matter and figure of a Comet, and the *impetus* at firſt impreſſed, make much to its motion: That Comets, which come out of larger Atmoſpheres, and from about their Æquator, and are of a compact body, are ſwifteſt, and eſpecially thoſe, that have their riſe from the Sun. How the motion of the *Spots* of the *Sun* may be compared with that of Comets? How the greateſt velocity and tardity of the motion of Comets may be limited? That there is a *Libratory* motion in Comets as well as in the Moon, *&c.*

The

The Curious are hereby advertiſed, that the Author hath thought fit to lodge with the *Publiſher* a number of Copies both of this *Cometography*, and of all his former Works, *viz.* the *Selenography*, *Mercurius in ſole viſus*, *Venus in ſole viſa*, *Epiſtolæ de motu Libratorio Lunæ*, and the *Prodromus* and *Mantiſſa* concerning the two Comets of *An.* 1664, and *An.* 1665. All which Books being order'd by the Author to be vended here, for an Exchange into the longeſt and beſt Teleſcope, that can be made by *Engliſh* Artiſts; thoſe that are deſirous to be furniſht with them, may pleaſe to addreſs themſelves to the *Publiſher*, who is ready to give them further information herein.

II. Renati Des Cartes EPISTOLÆ; *Pars I. & II.* Londini *A.* 1668. *in* 4°.

THough ſome few of theſe *Letters* were by the Author himſelf written in *Latin*, yet the farr greater part of them having been by him written in *French*, they are now come abroad all Tranſlated into *Latin*, for the benefit of thoſe, that are unskilful in the other Language. They contain very many Philoſophical queſtions and matters, of all ſorts, and an Explication of many difficulties, to be met with in the other Works of the Illuſtrious Author; and were written to ſome of the moſt Eminent perſons for knowledge and learning of this Age. The intelligent Reader will find here an incredible and exceedingly delightful variety of Subjects, *Geometrical*, *Arithmetical*, *Muſical*, *Optical*, *Mechanical*, *Phyſiological*, *Medical*, *Metaphyſical* and *Moral*.

There is a *Third* part of the ſame Authors Letters yet remaining un-tranſlated, which is like to follow very ſhortly, with ſome other Tracts, concerning *Man*, and the *Union of the Rational Soul with the Body*; whereof the former was written by *Deſcartes* himſelf, the latter by the Ingenious D. *Dela Forge*, upon *Carteſian* Principles.

III. Scrutinium Chymicum *VITRIOLI*, *Auth.* Joh. Georgio Trumphio, *Saxone*, *Med. Licentiato*. *Jenæ* 1667. *Conſiſting but of* 8 *or* 9 *ſheets in* 4°.

THis Author endeavours in this ſmall *Tract* to ſhew the Nature, Difference, Choice, Qualities and Vertues, (eſpecially in Phyſick) of *Vitriol*, together with the various wayes of preparing both dry and liquid Medicins out of that Mineral Juyce. The way of making Vitriol uſed at *Goſlar* in *Germany* (the Authors Native Country) we ſhall thence extract and give here verbatim, as follows;

Fit

Fit & Goſlarienſe *Vitriolum per coctu*ram. *Poſtquam enim terra vitriolata ex vicino monte* Rammelo *in officinas coctorias delata fuit, facto lixivio, in aheno plumbeo totum* Vulcano *negotium committunt. Hic poſtquam fideliter ſuam navavit operam, perque definitum coctioni tempus crepitantes ſubminiſtravit flammas, liquor ille coctus exhauritur, inque cados ligneos inſignis peripheriæ & altitudinis tranſmittitur. Super hæc vaſa lignea adornantur, tranſtrorum in morem, trabeculæ perforatæ. His foraminibus adaptantur, & firmantur calami arundinis, qui ad fundum uſque vaſis immittuntur. Ubi itaque congelaſcit, poſt aliquod temporis intervallum adhærent calamis chryſtalli vitriolati, eximium præbentes oculis ſolamen, pelluciditate ſua cum Sapphirina gemma decertantes.*

Here he examins, why Vitriol will onely be boyled in *Leaden* Veſſels, and alledges divers opinions concerning it.

He alſo mentions an Experiment, which ſeems pretty, if true; *viz.* that *Vitriol*, placed cloſe to *Amber*, will loſe its colour and pungency.

He takes notice, when he ſets forth the praiſes and uſes of this Mineral, that it alone may well make up the fourth part of an Apothecaries Shop, and cure the fourth part of Diſeaſes. A *Paracelſian* aſſertion!

He forgets not the *Sympathetick Powder*, made of this ſubſtance; nor its vertue in ſtopping pertinacious *Hæmorrhagies*; alledging an Example of a Country-man, who having been ſorely wounded in his Skull, ſo that the bleeding could not be ſtopp'd any other way, had by the application of this vitriolate powder preſent help, and ſoon after a perfect cure of his wound.

R. Vitrioli Goſlar. *in Solis radiis ad album calcinati uncias* VIII, *pulv.* Gummi tragac. *puriſſimi* I. *unciam. Miſc. invicem diligenter, ut fiat pulvis ſubtiliſſimus ſympatheticus.*

IV. Franciſci de le Boe Sylvii *PRAXIS MEDICÆ Idea novæ, Lib.* I. Lugd. Batav. *in* 12° 1667.

THis Treatiſe was not long ſince tranſmitted to the *Publiſher* by the *Author* himſelf, and there is perhaps as yet never an other Exemplar of it in *England*; which is therefore intimated here, that our Stationers may be invited to ſend for ſome Copies of it over, the Book ſeeming to be both very ingenious, and conſiderable.

There are in this *firſt* part of the *Idea* conſidered thoſe Diſtempers, which reſpect the diſeaſed Functions *Natural*, as in the *ſecond* part he intends to conſider thoſe, which regard the diſeaſed *Animal* Functions, and in the *third*, ſuch as belong to thoſe, that are appointed for *Generation*.

Of every Diſtemper he endeavours to diſcover its nature, cauſes, concomitants, remedies, of which laſt he delivers a great number of preſcriptions, which he varieth according to the various tempers and humors of Patients.

He intermixes abundance of Philoſophical Speculations and Remarkes, among which are ſome concerning Fermentation; the noxiouſneſs of all ſuch things, as either deſtroy or dull the Acid ſpirit of the Body in the work

of

of Nutrition; the dominion of the three Humors in the Body of Animals, viz. the *Gall*, the *Pancreatick Juyce*, and the *Saliva*, and their Mixture, either immediate or mediate, with the Blood returning to the Heart; as also their great influence, when they are vitiated, in disturbing the Effervescence of the Blood, as well as their power and vertue, when they are temper'd together in a due proportion, to cause a regular motion in the blood, and to convert meat into good nourishment: Farther, about the Change of the Chyle into Blood, and where that change is begun, where advanc'd, and where perfected: About the alteration made in the whole body of Animals by the Spermatick *Aura*, as to their Voice, fatness, sweetness, *&c.* About Respiration, and how that may cease for a while in *Syncope's* and *Hypochondriacal Suffocations* without death; about Sneezing, the Hickocke, Yawning, Pandiculation, and their Causes: The alteration, which the blood of the left Ventricle receiveth in the Lungs by the inspired Air, and the *Saliva*, or some other glandulous liquor: Of the Pulse; of the Plenty of Animal Spirits and its cause; of the return of Feaverish fits by intervals, together with the cause thereof, *&c.*

ERRATA.

UPon a second and more leisurable perusal of some of the former *Transactions*, there are found left the following faults; of which some may be so material as to prejudice the sense; *viz. p.*641. *l.*1, 2,3. the Author of the Book, there spoken of, thinks it more sutable to the tenor of that Book, to change those words, *A new method analytical for giving the Aggregat of an infinite or indefinite converging Series*, into these, *A new method Analytical, whereby in* general *he gives the termination of a converging series* conditionally, *and in two* particular *cases does the same* absolutely. Compare N. 37. p. 734. l.27.et seq. Besides, p. 654. l. 24. leg. MDCLVIII. p.725. l. 22. for 70 *odds* r. 70. *Combs.* p. 746. l. 24. *tam aperta.* p. 749. l. 6. *ducatur* pro *dicatur* p. 750. l. 9. *angulum solidum.* l.20. *Est quidem.* p. 754. l.32. *elegantis.* p. 755. l. 31. 0,000486203,——.p.756. l. 1. AHGN. p. 758. l. 11. *eaplana.* ibid. l.20. 8a3b', *&c.* ibid. *l* 23. *complentes.* ibid.l.28. ADEJ. p.764. l.8. leg. ≍ oLoI, *numerus.* p.778. l. ult. *seu pro sin.* Some literal and Grammatical faults, as *quadraturæ* pro *quadratura*; p. 753. l. 12 *homogeneorum* pro *homogenearum*, p. 778. *l.*39. and such like, the *Reader* will be pleas'd to mend himself.

FINIS.

In the *SAVOY*,
Printed by *T.N.* for *John Martyn*, Printer to the *Royal Society*, and are to be sold at the *Bell* a little without *Temple-Bar*, 1668.